

Notice of Allowability

Application No.

09/688,939

Examiner

Christopher Onuaku

Applicant(s)

DAVENPORT, WILLIAM

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/19/05.
2. ☒ The allowed claim(s) is/are 1-21&32-34 (now renumbered 1,2,8-15,3,7,4-6,16-21,23,22&24, respectively).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Allowable Subject Matter

Claims 1-21&32-34 are allowable over the prior art of record.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 1, the invention relates to a method of processing digital video data intended for normal mode display to obtain corresponding digital video data for trick-play-mode display, which includes modifying the normal mode digital video data to achieve a substantially uniform delivery rate to a video client.

The closest references Lane et al (US 6,031,960) disclose video recording and playback devices, including methods for insuring that a trick-play data stream, e.g., a stream of data used for fast forward or reverse playback operation, complies with preselected data standards, and Sawada et al (US 6,219,381) teach an image processing apparatus and a method in which the moving picture data encoded by compressing moving pictures using the inter-frame prediction are sent out and reproduced at a fixed rate, including an image processing apparatus and method for realizing a trick-play such as rapid feed and reverse rapid feed.

However, Lane et al and Sawada et al fail to explicitly disclose a method for processing digital video data for trick-mode display, the digital video data having an ordered sequence of frames, where the method further comprises selecting a set of

Art Unit: 2621

frames from the ordered sequence of frames and for each frame in the selected set, generating a modified frame for trick-mode display according to whether the corresponding delivery interval of the selected frame is less than a lower bound of the range or greater than an upper bound of the range, the modified frame including data representative of the selected image modified for delivery at a delivery interval within the range of delivery intervals.

Regarding claim 32, the invention relates to a method of processing digital video data intended for normal mode display to obtain corresponding digital video data for trick-play-mode display, which includes modifying the normal mode digital video data to achieve a substantially uniform delivery rate to a video client.

The closest references Lane et al (US 6,031,960) disclose video recording and playback devices, including methods for insuring that a trick-play data stream, e.g., a stream of data used for fast forward or reverse playback operation, complies with preselected data standards, and Sawada et al (US 6,219,381) teach an image processing apparatus and a method in which the moving picture data encoded by compressing moving pictures using the inter-frame prediction are sent out and reproduced at a fixed rate, including an image processing apparatus and method for realizing a trick-play such as rapid feed and reverse rapid feed.

However, Lane et al and Sawada et al fail to explicitly disclose computer-readable media having encoded thereon software for processing digital video data for trick-mode display, the software including instructions for causing a computer to select

Art Unit: 2621

a set of frames from an ordered sequence of frames from the digital video data, and for each frame in the selected set, generate a modified frame for trick-mode display according to whether the corresponding delivery interval of the selected frame is less than a lower bound of the range or greater than an upper bound of the range, the modified frame including data representative of the selected image modified for delivery at a delivery interval within the range of delivery intervals.

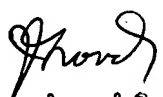
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Onuaku whose telephone number is 571-272-7379. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on 571-272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


COO
2/17/06


James J. Groody
Supervisory Patent Examiner
Art Unit 262 2621